Determination of Public Land (Rangeland) Health for 64079 WEST SIDE

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on the assessments, it is my determination that the public land within the West Side allotment #64079 meets the Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard will not be addressed.

/s/ T. R. KREAGER	09/20/2004
Assistant Field Manager	Date

Standards of Public Land Health
Evaluation of 64079 WEST SIDE Allotment
[07/27/2004]

The Roswell Field Office conducted rangeland health assessments at two (2) study sites within the West Side allotment #64079. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
64079-NORTH-F060	X			X			N/A		
64079-SOUTH-F061	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for the public land on the West Side allotment #64079. Ten (10) of these assessed soil site stability, 11 hydrologic function and 13 biotic integrity. These qualitative assessments in conjuntion with quantitaive information gathered from previous data collected on 2 range trend study locations within the allotment were utilized to make rangeland health determinations. Quantitative evaluations are performed by the Roswell Field Office include some or all of the following: ground and vegeative cover and composition, production, frequency, occurence and ecological condition. These collections which were initiated in the early 1980's are scheduled and conducted approximately every 5 years.

North Pasture is a Shallow SD-3 ecological site with 3,242 acres/1474 hectares. The soil phase is a (Tg) Tencee-Upton complex on nearly level to gently rolling soil on upland ridges west of the Pecos River. Slopes are 0 to 9 percent. This allotment possesses habitat for pronghorn (Antilocapra americana) and mule deer (Odocoileus hemionus). At the bottomland portion of this pasture next to and including the private land holding, is where livestock are currently grazing and appear to be holding here. With the recent rainfall, the bottomland swale comprised mainly of alkali sacaton (Sporobolus airoides) and tobosa (Pleuraphis mutica) is vegetating with some puddling and ponding occuring. The study area is however situated upland from the swale and is made up of a desert shrub grassland mix.

The majority of indicators assessed rated Slight to Moderate. Only minor erosion is taking place with stable and short water flow patterns. Approximately 16 percent rock cover has been the long-term average with the remainder made up of 50% bareground

and approximately 18 percent vegetative cover. Indicators with all soil and hydrologic attributes rated Slight to Moderate except for physical crusts which were Moderate. Physical crust is weak in some places and it's continuity is broken. The site has some gravelly influence with small rock and pebbles on the soil surface. The plant groups are holding steady with influxes of Christmas cholla (Opuntia imbricata) and creosote (Larrea tridentata). The black grama (Bouteloua eriopoda) is somewhat abundant with occurences of burrograss (Scleropogon brevifolius), feather dalea (Dalea formosa), range ratany (Krameria spp.) and dogweed (Dyssodia spp.). Annual production is Moderate with 1/2 of the long-term average estimated. Invasive plants rates Moderate also with creosote scattered throughout.

South Pasture rated most indicators in the Slight to Moderate category. The recent dry conditions have possibly had an impact on this site. Bare patches of soil can be observed with some gravel and pebble cover. Functional'structural groups rate Moderate as dropseed (Sporobolus spp.), sideoats grama (Bouteloua curtipendula) and skunkbush (Rhus spp.) have been reduced. Christmas cholla is growing in approximately 2/3 of the treated creosote which suggests that the herbididal treatment is the recent past has helped to propagate this plant. Mesquite (Prosopis glandulosa) can be seen surrounding a dirt tank which is holding water, downhill from this upland area. A gas pipeline is intersecting the site and is evidenced by the rocky berm which has been out into place. Very little vegetation is observed on the pipeline. Annual production rates Moderate as 40% of the ESD average and long-term data is estimated. Invasive plants is Moderate with creoste scattered and snakeweed (Gutierrezia sarothrae) common throughout. All other indicators rated None to Slight with normal ranges of variability.

Hydroogy - Pasture North - The physical/biological crust indicator rated as moderate. The soil crusts were only found in protected areas with a minor component in interspaces. All other indicators rated as none to slight or slight to moderate. Sand and gravel deposits of Quaternary pediment deposits outcrop in the area.

Pasture South - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind scoured, blowouts, and or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount, and physical/chemical/biological crusts indicators have rated as none to slight or slight to moderate. Sand and gravel deposits of Quaternary alluvial deposits outcrop in the area.

Wildlife - Evaluation of the integrity of the biotic community considered several indicators as attribute indices for the area of interest. Biotic indicators are interrelated with several other indicators, including soil/site stability, hydrologic function, and vegetation. Several indicators are singularly biotic and address the vegetative aspect of the ecological site description, such as functional/structural groups and annual production as discussed above.

North Pasture - Specifically, two biotic indicators fell within the Moderate rating, annual production and invasive plants (creosote being cited). Considering present climate

regimes, annual can be expected to fall within the normal range of variability. Range condition (based on production) appears to have declined over the years, even when considering the drought conditions that has prevailed over the past several years. Browse species can still be found in the drainages that characterize the Walnut Creek and Felix River watershed. As the area of interest falls within an ecotone between the Chihuahuan desert and grasslands biome, desert shrub components can be expected in the area and has increased with declining range site conditions and overall drying conditions over time, especially on the shallow soils.

In addition to the standard worksheet biotic factors, four specific wildlife indicators and descriptors are included in this evaluation. Wildlife habitat and population indicators rate Slight to Moderate, primarily for pronghorn (Antilocapra americana) and a variety of non-game terrestrial species. The composition of vegetation reflects current climatic conditions, e.g., drought for the past several years. Range site production and cover of a variety of preferred plant species for wildlife, such as forbs and woody browse species, and the availability of seed for food and regeneration, is moderated by climate and land use. It should be noted that the study site is on the shallower soils although swales are another important habitat component not specifically addressed in this assessment.

With respect to Special Status Species, none are known to occur in the area of interest at this time and the habitat and population indicators are, therefore, rated None to Slight.

South Pasture - Basically the same as North Pasture with the addition of functional /structural groups in the Moderate rating due to dropseed, sideoats grama and skunkbush falling out of the vegetative composition. Further note that this pasture was chemically treated for creosote some time in the past.

It is the professional opinion of the Assessment Team that the public land within the West Side allotment meets the Upland and Biotic standards. There are no Riparian issues present, therefore this standard was not addressed. See site notes and recommendations for further information regarding these assessments.

Recommendations: Regular scheduled monitoring should continue on the two sites. A more critical look at the brush control should be performed to determine the effectiveness of the herbicidal treatment on creosote. It appears that the treatment helped to establish a new crop of Christmas cholla growing up from the middle of the dead creosote clumps. Perhaps a more condusive environment was established for the cholla. A closer observation to record the encroachment of cholla should be done.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64079-NORTH-F060			
Legal Land Desc	NWNE 7 0150S 0240E Meridian 23	Acreage	3242
Ecosite	042CY025NM SHALLOW SD-3	Photo Taken	Y
Watershed	13060007110 COTTONWOOD-WALNUT		
Observers	NAVARRO/MCGEE	Observation Date	07/27/2004
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	Tg	Soil Taxon Name	TENCEE
Texture Class	NM666 GR-L	Soil Phase	TENCEE-UPTON
Texture Modifier	NM666 GRAVELLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	10.42	NOAA Growing Season Precipitation	7.68
NOAA Avg Annual Precipitation	12.52	NOAA Avg Growing Season Precipitation	10.24
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						

S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	
Comments:	50% rock with 20% rock cover.					
S H	Gullies				X	
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas				X	
Comments:						
H	Litter Movement				X	
Comments:	Some displacement.					
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:	Some pebbles and gravel have migrated towards the surface and there has been some A-horizon loss.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:	Good infiltration, Grass cover indicates fibrous roots are holding the moisture along with pebbles and gravel,					
S H B	Compaction Layer				X	
Comments:						
B	Functional/Structural Groups				X	
Comments:	This is typical of an upland area with good grass and shrub cover.					
B	Plant Mortality/Decadence					X
Comments:						

H B	Litter Amount				X	
Comments:	Litter amount falls well within range.					
B	Annual Production			X		
Comments:	About 60% of potential and 50% of long-term average.					
B	Invasive Plants			X		
Comments:	Creosote and Christmas cholla scattered.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts			X		
Comments:	Physical crusts especially in interspaces.					
B	Wildlife Habitat				X	
Comments:	Rolling hills desert grassland habitat type with Chihuahuan desert influence, e.g., gravelly soils with creosote bush. Grass and forb production on shallow sites reflect current precipitation regimes (droughty over the past several years). Draw bottoms within the pasture are the more productive sites.					
B	Wildlife Populations				X	
Comments:	No specific wildlife population data at this time. Primary species of concern are pronghorn antelope and a variety on non-game terrestrial wildlife species.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	1	8	1
H	Hydrologic	0	0	0	10	1
B	Biotic	0	0	2	7	4

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	1	9
Hydrologic		0	0	11
Biotic		0	2	11

Site Notes: Livestock are currently in this pasture but are utilizing the bottoms. There are natural drainage patterns occuring with sedimentation and erosion. From this upland area though the runoff is minimal.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64079-SOUTH-F061			
Legal Land Desc	NESW 18 0150S 0240E Meridian 23	Acreage	2597
Ecosite	042CY025NM SHALLOW SD-3	Photo Taken	Y
Watershed	13060007110 COTTONWOOD-WALNUT		
Observers	NAVARRO/MCGEE	Observation Date	07/27/2004
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	Tg	Soil Taxon Name	TENCEE
Texture Class	NM666 GR-L	Soil Phase	TENCEE-UPTON
Texture Modifier	NM666 GRAVELLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	10.42	NOAA Growing Season Precipitation	7.68
NOAA Avg Annual Precipitation	12.52	NOAA Avg Growing Season Precipitation	10.24
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						

S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	
Comments:	Now at 50%					
S H	Gullies				X	
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas				X	
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups			X		
Comments:	Absence of gramas and dropseed.					
B	Plant Mortality/Decadence				X	
Comments:	Creosote appears to be treated. Christmas cholla is growing up from most of treated decadent creosote plants.					

H B	Litter Amount				X	
Comments:	Now 10-20%					
B	Annual Production			X		
Comments:	Production is now estimated at 40% of long-term average.					
B	Invasive Plants			X		
Comments:	Snakeweed common and creosote scattered.					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical crusts evident.					
B	Wildlife Habitat				X	
Comments:	Rolling hills desert grassland habitat type with Chihuahuan desert influence, e.g., gravelly soils with creosote bush. Grass and forb production on shallow sites reflect current precipitation regimes (droughty over the past several years). Draw bottoms within the pasture are the more productive sites. Note: This pasture was chemically treated for creosote some time in the past.					
B	Wildlife Populations				X	
Comments:	No specific wildlife population data at this time. Species of concern include pronghorn antelope and a variety of non-game terrestrial wildlife species.					
B	Special Status Species Habitat					X
Comments:	None known to occur.					
B	Special Status Species Populations					X
Comments:	None known to occur.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for

each of the Standard Attributes.

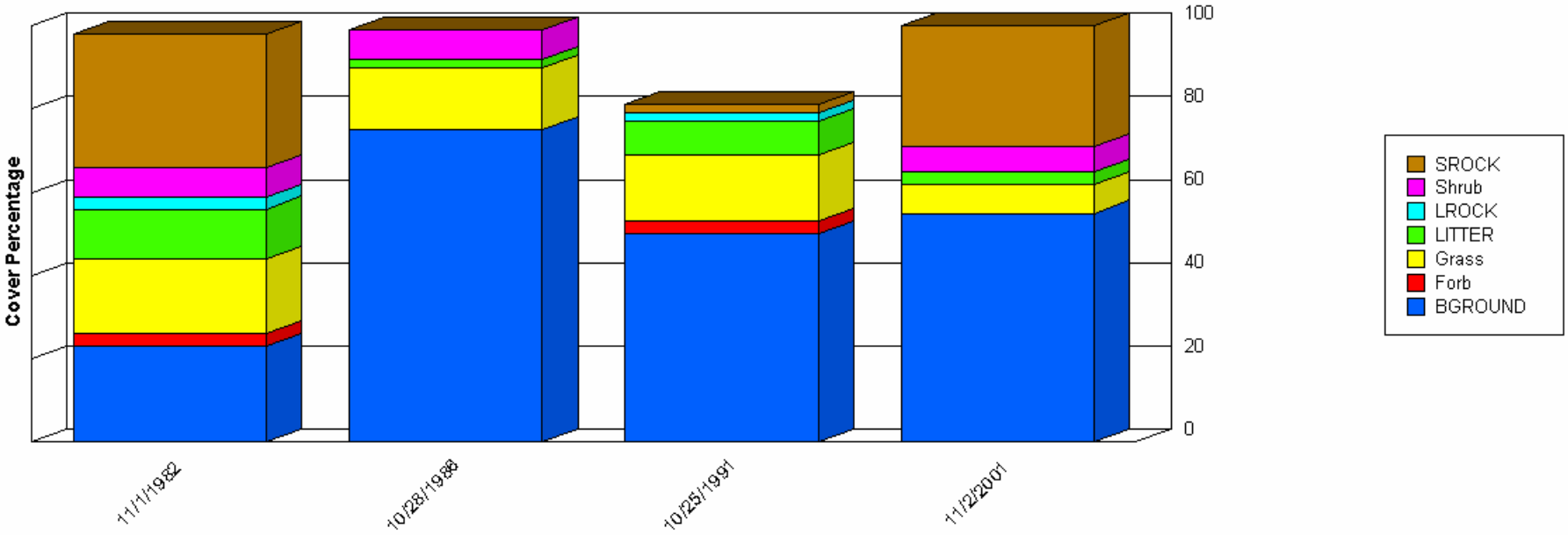
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	8	2
H	Hydrologic	0	0	0	9	2
B	Biotic	0	0	3	7	3

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	3	10

Site Notes: This site is upland from a dirt tank where mesquite is dominate. A pipeline intersects two of the transects . Photos were taken.

Ground Cover Trends



	11/1/1982	10/28/1986	10/25/1991	11/2/2001
BGROUND	23.00	75.00	50.00	55.00
Forb	3.00	0.00	3.00	0.00
Grass	18.00	15.00	16.00	7.00
LITTER	12.00	2.00	8.00	3.00
LROCK	3.00	0.00	2.00	0.00
Shrub	7.00	7.00	0.00	6.00
SROCK	32.00	0.00	2.00	29.00

	11/1/1982	10/28/1986	10/25/1991	11/2/2001
Total	98.00	99.00	81.00	100.00

Report Parameters

SITE NAME LIKE	64079-NORTH-F060
ON/AFTER	10/01/1982
ON/BEFORE	09/30/2002

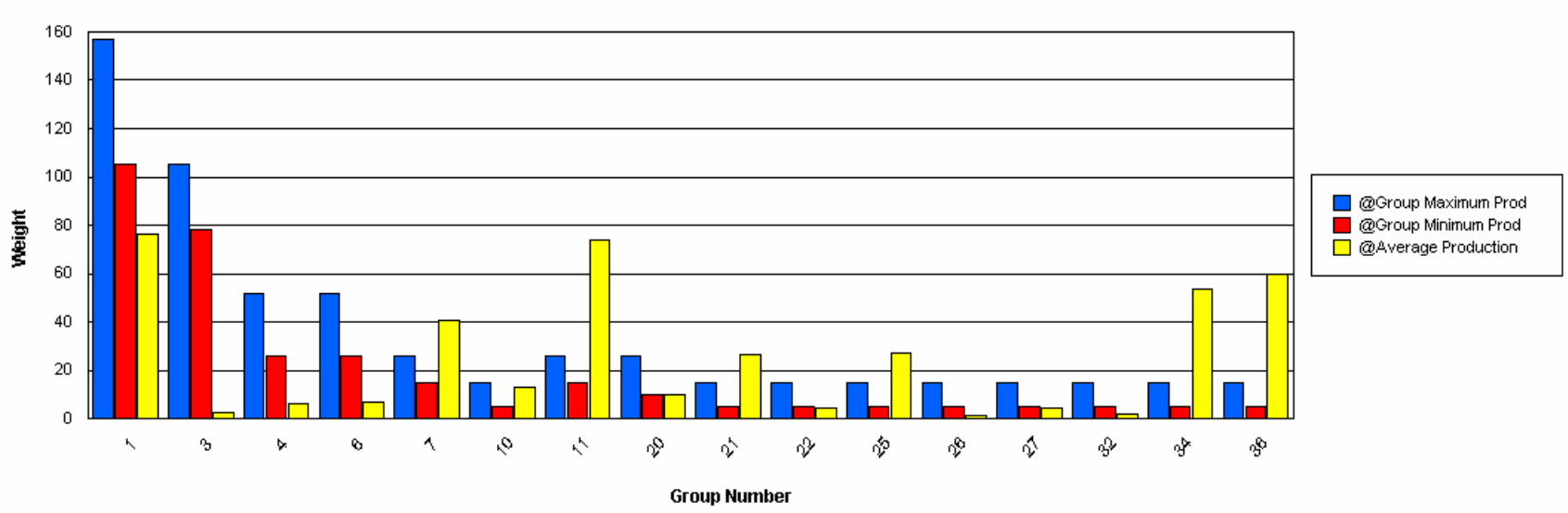
Functional / Structural Groups

Report Parameters

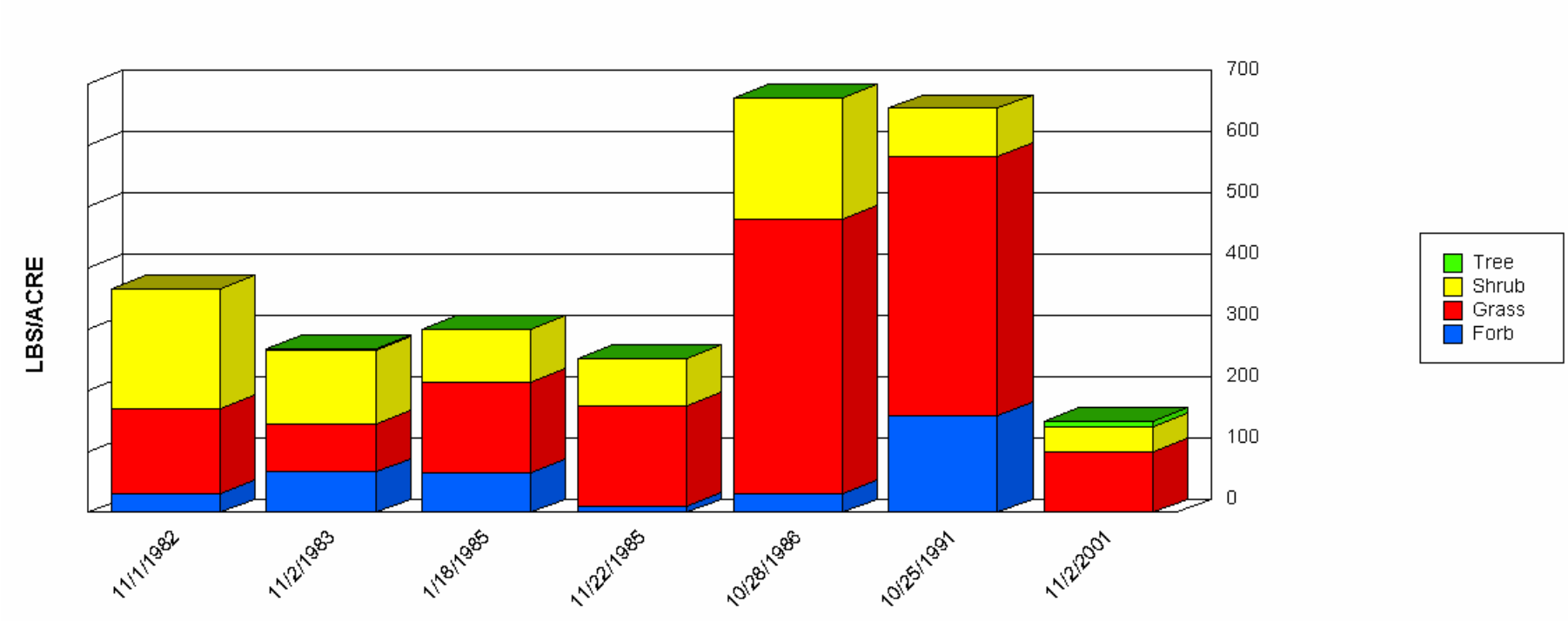
SITE NAME LIKE	64079-NORTH-F060
ON/AFTER	10/01/1982
ON/BEFORE	09/30/2002
MIN LBS TO GRAPH	1
SELECTED ECOSITE	042CY025NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	105	157	12.00	201.00	76.43	63.63
2	Grass	BOCU	78	105	0.00	4.00	0.67	1.49
3	Grass	BOGR2	78	105	0.00	9.00	2.67	3.54
4	Grass	MUPO2	26	52	0.00	26.00	6.50	11.26
6	Grass	SPCR	26	52	0.00	29.00	6.67	10.19
7	Grass	TRMU	15	26	0.00	110.00	25.71	36.50
7	Grass	TRPI2	15	26	0.00	37.00	14.83	12.24
10	Grass	ERPU8	5	15	1.00	55.00	13.00	17.90
11	Grass	ARIST	15	26	2.00	107.00	35.71	31.54
11	Grass	HIMU2	15	26	0.00	37.00	7.67	13.20
11	Grass	MUAR2	15	26	0.00	46.00	17.67	14.62
11	Grass	SCBR2	15	26	0.00	49.00	12.71	15.37
14	Grass	PAHA	5	15	0.00	4.00	0.67	1.49
17	Forb	SPHAE	5	15	0.00	0.00	0.00	0.00
20	Forb	CROTO	10	26	0.00	16.00	6.43	5.39
20	Forb	CRPO5	10	26	0.00	3.00	0.60	1.20
20	Forb	DYAC	10	26	0.00	17.00	2.83	6.34
21	Forb	AAFF	5	15	0.00	22.00	8.75	9.31
21	Forb	CARLI	5	15	0.00	1.00	0.17	0.37
21	Forb	DYPE	5	15	0.00	56.00	17.80	22.70
22	Forb	COCA2	5	15	0.00	3.00	0.50	1.12
22	Forb	ERTE13	5	15	0.00	3.00	0.60	1.20
22	Forb	HOGL2	5	15	0.00	2.00	0.67	0.75
22	Forb	MELE2	5	15	0.00	7.00	2.00	2.76
22	Forb	PENA	5	15	0.00	1.00	0.50	0.50
25	Shrub	LADI2	5	15	0.00	66.00	27.00	20.78

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
26	Shrub	KRPA	5	15	0.00	3.00	1.20	1.47
27	Shrub	COER5	5	15	0.00	16.00	4.75	6.61
32	Shrub	OPLE	5	15	0.00	6.00	2.00	2.83
32	Shrub	OPUNT	5	15	0.00	1.00	0.17	0.37
34	Shrub	GUSA2	5	15	0.00	106.00	53.83	37.79
36	Shrub	ACACI	5	15	0.00	4.00	2.00	2.00
36	Tree	ACGR	5	15	0.00	2.00	0.40	0.80
36	Shrub	DAFO	5	15	0.00	28.00	5.57	9.41
36	Shrub	DYPE3	5	15	0.00	102.00	46.67	42.09
36	Shrub	MESC	5	15	0.00	4.00	1.33	1.89
36	Shrub	ZIPU	5	15	0.00	21.00	3.50	7.83



Production Lbs/Acre Trends

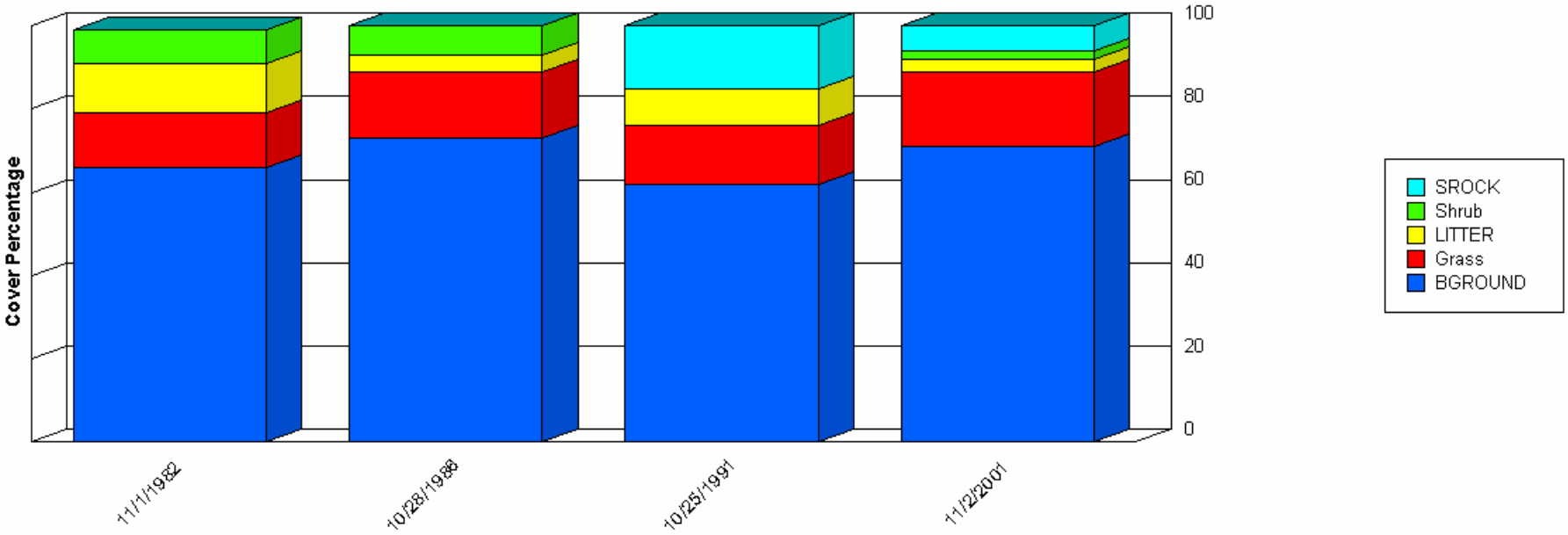


	11/1/1982	11/2/1983	1/18/1985	11/22/1985	10/28/1986	10/25/1991	11/2/2001
Forb	**31.00**	**66.00**	**64.00**	**11.00**	**31.00**	**159.00**	**0.00**
Grass	**139.00**	**79.00**	**149.00**	**163.00**	**447.00**	**422.00**	**98.00**
Shrub	**195.00**	**121.00**	**86.00**	**78.00**	**199.00**	**79.00**	**41.00**
Tree	**0.00**	**2.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.00**
Total	**365.00**	**268.00**	**299.00**	**252.00**	**677.00**	**660.00**	**149.00**

Report Parameters

SITE NAME LIKE	64079-NORTH-F060
ON/AFTER	10/01/1982
ON/BEFORE	09/30/2002

Ground Cover Trends



	11/1/1982	10/28/1986	10/25/1991	11/2/2001
BGROUND	66.00	73.00	62.00	71.00
Grass	13.00	16.00	14.00	18.00
LITTER	12.00	4.00	9.00	3.00
Shrub	8.00	7.00	0.00	2.00
SROCK	0.00	0.00	15.00	6.00
Total	99.00	100.00	100.00	100.00

Report Parameters

SITE NAME LIKE	64079-SOUTH-F061
ON/AFTER	10/01/1982
ON/BEFORE	09/30/2002

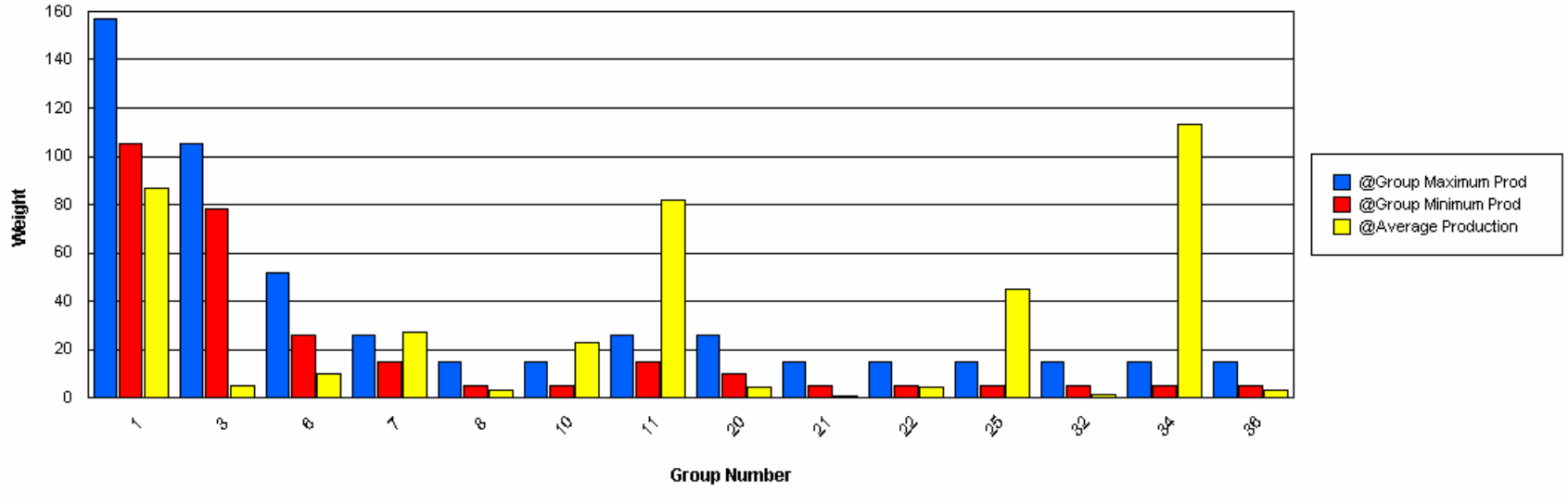
Functional / Structural Groups

Report Parameters

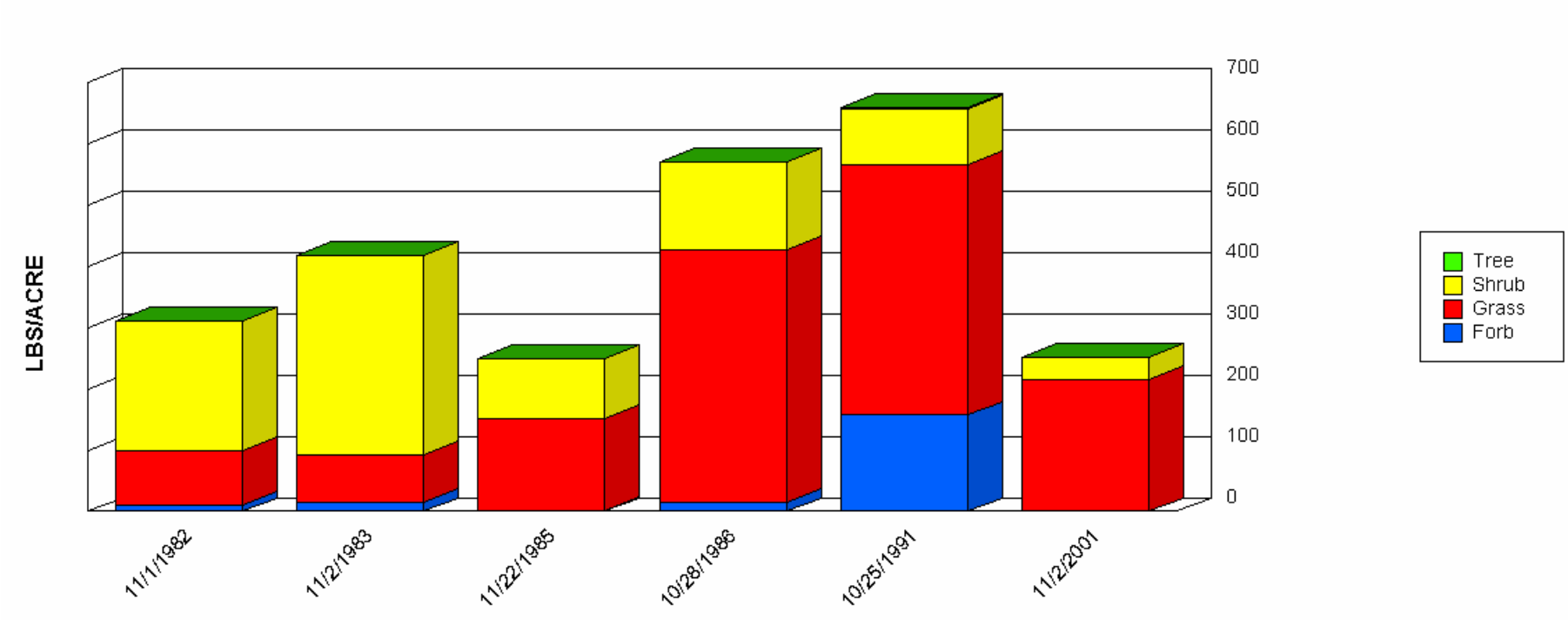
SITE NAME LIKE	64079-SOUTH-F061
ON/AFTER	10/01/1982
ON/BEFORE	09/30/2002
MIN LBS TO GRAPH	1
SELECTED ECOSITE	042CY025NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	105	157	13.00	233.00	86.67	76.20
3	Grass	BOGR2	78	105	0.00	9.00	2.83	4.02
3	Grass	BOHI2	78	105	0.00	9.00	2.25	3.90
6	Grass	SPCR	26	52	0.00	41.00	10.00	14.41
7	Grass	TRMU	15	26	0.00	38.00	13.83	13.50
7	Grass	TRPI2	15	26	0.00	34.00	13.67	10.31
8	Grass	MUAR	5	15	0.00	8.00	3.33	2.98
10	Grass	ERPU8	5	15	4.00	68.00	22.83	21.57
11	Grass	ARIST	15	26	0.00	89.00	28.33	28.83
11	Grass	HIMU2	15	26	0.00	32.00	15.40	11.89
11	Grass	MUAR2	15	26	0.00	31.00	10.25	12.17
11	Grass	SCBR2	15	26	4.00	66.00	27.80	21.34
12	Grass	AAGG	0	5	0.00	1.00	0.50	0.50
18	Forb	LESQU	5	15	0.00	1.00	0.50	0.50
20	Forb	CROTO	10	26	0.00	10.00	3.00	3.79
20	Forb	CRPO5	10	26	0.00	5.00	1.25	2.17
20	Forb	DYAC	10	26	0.00	0.00	0.00	0.00
21	Forb	AAFF	5	15	0.00	2.00	1.00	0.82
21	Forb	COLDE	5	15	0.00	0.00	0.00	0.00
22	Forb	ERTE13	5	15	0.00	5.00	1.80	2.23
22	Forb	HOGL2	5	15	0.00	1.00	0.20	0.40
22	Forb	MELE2	5	15	0.00	8.00	2.20	3.12
22	Forb	PENA	5	15	0.00	1.00	0.25	0.43
25	Shrub	LADI2	5	15	3.00	88.00	45.00	32.84
32	Shrub	OPIM	5	15	0.00	4.00	1.33	1.89
34	Shrub	GUSA2	5	15	11.00	242.00	113.40	74.86

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
36	Tree	ACGR	5	15	0.00	2.00	0.50	0.76
36	Shrub	DAFO	5	15	0.00	17.00	2.83	6.34



Production Lbs/Acre Trends



	11/1/1982	11/2/1983	11/22/1985	10/28/1986	10/25/1991	11/2/2001
Forb	**10.00**	**14.00**	**1.00**	**14.00**	**157.00**	**0.00**
Grass	**89.00**	**79.00**	**151.00**	**413.00**	**409.00**	**216.00**
Shrub	**211.00**	**325.00**	**97.00**	**143.00**	**90.00**	**36.00**
Tree	**1.00**	**0.00**	**0.00**	**0.00**	**2.00**	**0.00**
Total	**311.00**	**418.00**	**249.00**	**570.00**	**658.00**	**252.00**

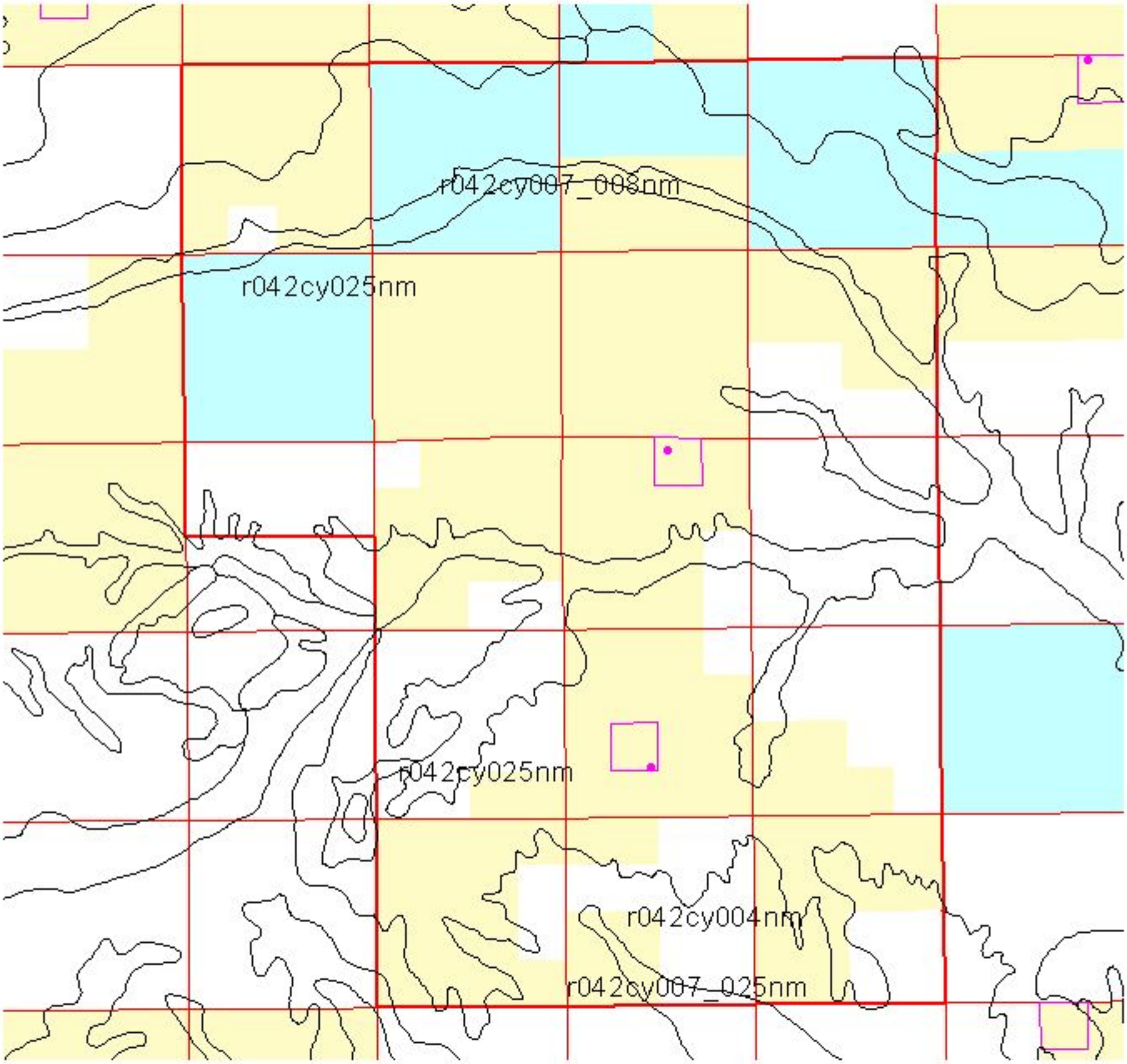
Report Parameters

SITE NAME LIKE	64079-SOUTH-F061
ON/AFTER	10/01/1982
ON/BEFORE	09/30/2002

Rangeland Health Assessment
Ecological Sites

Allotment ~~64093~~ 64079

T14.R23E



T15S.R24E

0.6 0 0.6 Miles

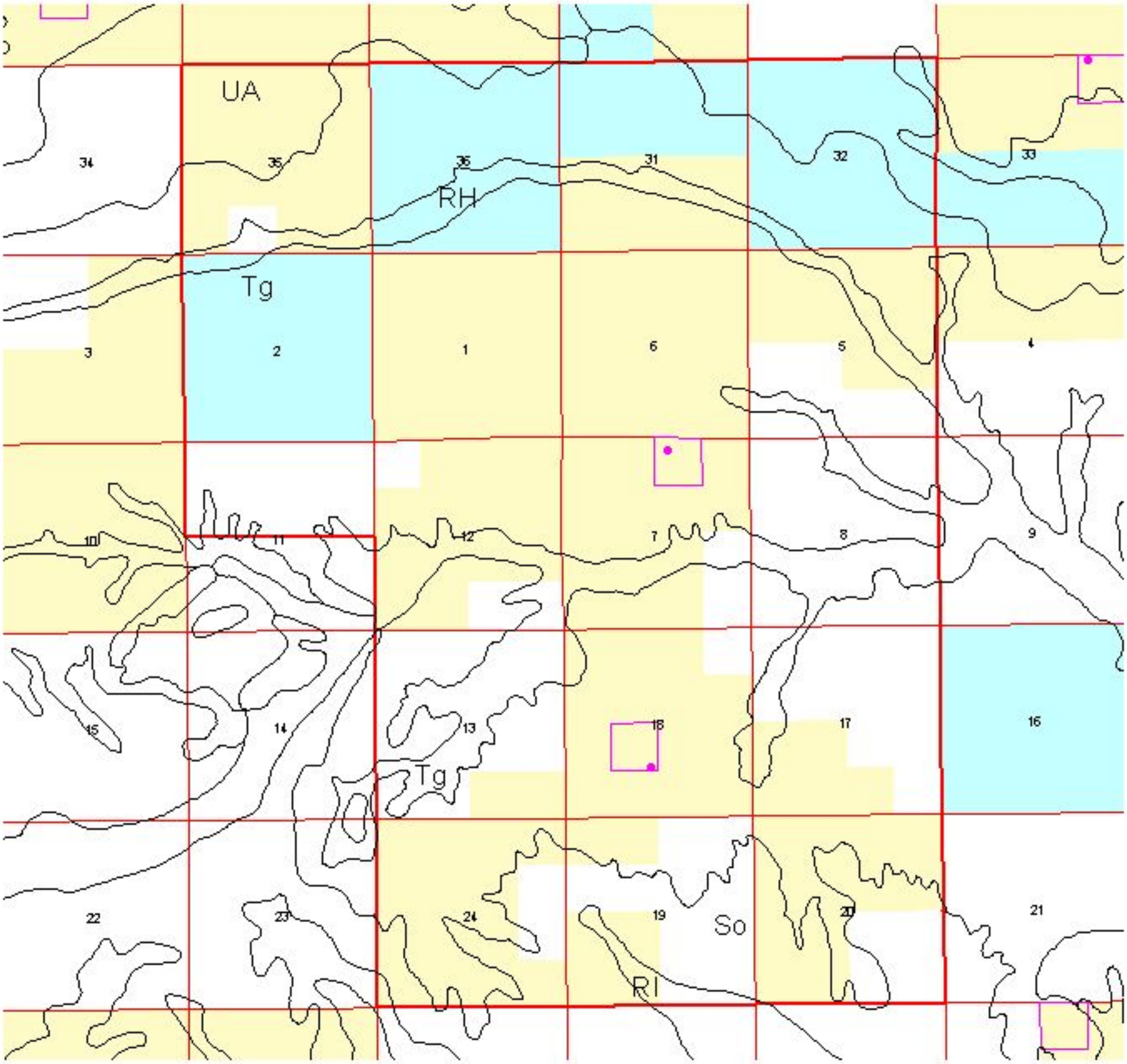
Public
Study Plots
State
Private
Study Locations
Ecological Sites
Allotment Boundary

Produced by the Roswell Field Office
GIS Intern on July 25, 2003.

Rangeland Health Assessment
Soil Mapping Units

Allotment ~~64093~~ 64079

T14.R23E



T15S.R24E

0.6 0 0.6 Miles

Public
Study Plots
State
Private
Study Locations
Soil Mapping Units
Allotment Boundary

Produced by the Roswell Field Office
GIS Intern on July 25, 2003.